



The ATOM family symposium – The Australian Paracetamol project

Angela Chiew^{1,2,3}, Geoffrey Isbister^{3,4,5}, Colin Page^{6,7}, Katharine Kirby², Betty Chan^{1,3}, Nicholas Buckley^{2,3}

¹*Clinical Toxicology Unit, Department of Emergency Medicine, Prince of Wales Hospital, Randwick 2031 NSW, Australia*

²*Department of Pharmacology, School of Medical Sciences, University of Sydney, Sydney 2006, NSW, Australia*

³*New South Wales Poisons Information Centre, Children's Hospital at Westmead, Westmead, NSW Australia*

⁴*Clinical Toxicology Research Group, University of Newcastle 2300, NSW, Australia*

⁵*Department of Clinical Toxicology and Pharmacology, Calvary Mater Newcastle, Newcastle, Australia*

⁶*Clinical Toxicology, Princess Alexandra Hospital, Woolloongabba 4102 QLD Australia*

⁷*Queensland Poisons Information Centre, Lady Cilento Children's Hospital, Brisbane, QLD, Australia*

Paracetamol is commonly taken in overdose. The majority of patients ingest less than 20 g of paracetamol and the standard dose of intravenous acetylcysteine of 300mg/kg over 20-21h is sufficient treatment. However, there is increasing concerns that those taking “massive” overdoses or ingesting modified release paracetamol have higher rates of hepatotoxicity and that in these patients standard treatment may not be sufficient.

The Australian Paracetamol Project is a prospective observational study, which recruited patients from Jan 2013–Jun 2017, from 5 clinical toxicology units and calls to two Poisons Information Centre. This project looked at various high risk paracetamol overdoses including massive and modified release ingestions. The aim of this project was to describe the clinical characteristics and outcomes in these patients. In particular, whether activated charcoal or increased acetylcysteine dose decreased the rate of acute liver injury.

In this talk we will look at the evidence for treatments such as activated charcoal and increased acetylcysteine dosage in these higher risk patients. We will also look at new biomarkers and how they may aid future research.